

102 - ANALYSIS OF BODY WEIGHT IN RELATION TO SCHOOL BACKPACK IN A PRIVATE SCHOOL ZONE NORTH OF PORTO ALEGRE.

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INTRODUCTION

Students sit for long hours throughout the school year and carry all the school supplies into backpacks. A healthy school environment is all that parents expect their children are to join in school life.

According to Hong et al. (2000 apud COSTA, 2010) reported that the backpack is the most universal and generic method used by students to organize and carry all the school supplies, sports equipment, supplements and other utensils needed for the realization of classes, is also not used just because it is trendy, but because it is a useful and advantageous way to carry the weight of school.

According to César (2004 apud Falsarella; BOCCALETTO; LAMB), incorrect postural habits, adopted since the early years of schooling, are cause for concern. Because children meet in the growth process, they are more prone to deformations. Thus, guide and intervene in the habits and activities, this phase of life is essential for the individual to develop body awareness, moreover, there is a significant contribution to the knowledge of his own body with autonomy, in order to reduce possible postural disorders.

We live in a prejudiced society, where everyone who does not have similar behaviors, modern materials and brands that the media imposes itself can be broken somehow. Individuals who do not use modern backpacks, school subjects the cartoon of the moment, they are often rejected, causing problems in socialization and self-esteem. The issue raised directly implies the prevention of postural problems that will have in adulthood, knowing positively interfere in this aspect, given that this is occurring at a rate of growth generating numerous vices posture, damaging the physical development of the student. Moreover, one should remember that the involvement of the whole school community: teachers, direction, staff, parents and family should be a goal to be achieved, so that students have the best possible use in passing school.

Through information, people, especially children, where the disease process is not yet installed, orient the proper posture for carrying weights, for example, school bag, aiming for a future with less incidence of back pain, a since, according to data from WHO (2004) 85% of people have, will have, or had a day back pain due to postural problems with its genesis in childhood.

Therefore the aim of this study was to analyze body weight in relation to school backpack at a private school in the North Zone of Porto Alegre to know whether to use their backpacks within the suggested maximum weight allowed by the WHO and by Law No. 2772/97.

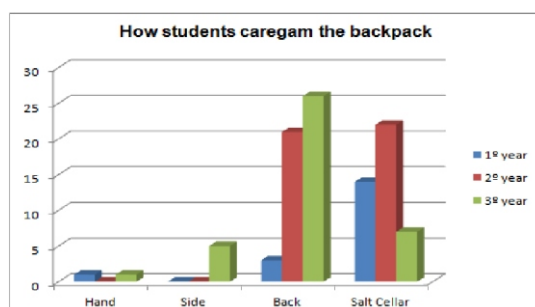
METHODICAL DESIGN

This is an observational cross-sectional descriptive-analytical concerned with identifying the weight of the school backpack Elementary School. The weight of school supplies will be obtained by taking two measurements. At first, the participants when they arrived in assessment room with all your stuff will be heavy. Then they left out the material and will be weighed again. From this information you can check the proportional weight of the material in relation to body weight. For this procedure, a digital scale is used Filizola with 100g precision.

The proportional weight of school supplies will be categorized as less than 10% and greater than 10%, according to figures proposed by Hong and Brueggemann (2000 apud RITTER, 2009) and this variable will be called health criteria for the transportation of school supplies.

The study included 101 students of a private school Zone north of Porto Alegre, students of 1st, 2nd and 3rd year of elementary school. All participants were aged from 6 to 9 years. The students' participation in the survey is consistent with resolution 196/96 (BRAZIL, 1996) of the National Health Council (CNS), using the Terms of Consent to where data collection was used "instrument for Knowledge Perception of Students on the School Environment Posture Adopted - POSPER "(RITTER; SOUZA, 2006 apud RITTER, 2009), adapted for this study.

RESULTS AND DISCUSSION



Graph 1 - Distribution what type of backpack is mostly used by students for transportation of school supplies

We found that in the opinion of respondents, the backpack to carry with two handles on the back is the most used by students of the 3rd year (66%) and least used by the students of 1st, 2nd and 3rd year, is to load unilaterally both to carry in hand, as the load on one shoulder were the least cited.

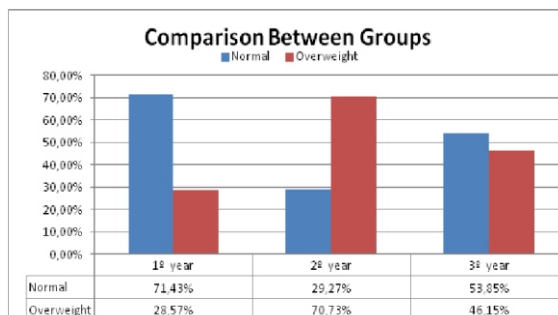
In the study by Pascoe et al. (1997), a backpack with a cross strap over one shoulder and chest was often carried, 73%

of students.

In the study by Sheir-Neiss et al. (2003) the vast majority of participants, 87.6% carried the backpacks using the straps on both shoulders.

According to Dale (2004) backpacks with straps for both shoulders are more effective and secure than backpacks used in one shoulder, because the weight of the backpack is supported by abdominal and spinal muscles.

But most students of 1st year (77%) and 2nd year (50%) use the backpack wheel, taking it by the handle and dragging across the floor. Market were also included backpacks with wheels and was initially suggested to be a great ergonomic solution for excess load on the musculoskeletal system (Cardon and Balagué, 2004-a; Forjuoh et al., 2003-b), however if are carried or transported incorrectly shoulders seem a risk to health (Forjuoh et al., 2003-b; Forjuoh et al., 2004).



Graph 2: Comparison of the weight of the backpacks of the 1st, 2nd and 3rd year.

In comparison charts note that the class of 1st year, 71.43% of the students are with the weight of the backpack suited to their body weight. Have the class 2nd year, 70.73% of students are overweight. This shows a very large imbalance. And students of 3rd year are average, 53.85% are within 10%. However, despite the recommendations made by the education authorities, studies continue to refer school bags weighing more than 10% of the body weight of children (Lai and Jones, 2001).

In the study by Viry et al. (1999) found to carry backpacks weighing more than 20% of body weight corresponding to 49% of children in the study. In my study it was found that the majority of children are making adequate weight.

The AOTA (American Occupational Therapy Association) suggested a 15% weight to body weight, while the APTA (American Physical Therapy Association) recommended that the weight of the backpacks must not exceed 10-15% of body weight for children. It is fundamental limits to determine the weight carried by children (Grimmer and Williams, 2000). Research like the World Health Organization - WHO (2009 apud COSTA, 2010) argues that the recommended weight of a school bag, carried by a student shall not exceed 10% of the body weight of each child although this limit is often exceeded because a higher weight. The study Forjuoh (2004) refers carrying backpacks light, mention other articles carrying backpacks with moderate weight, ranging from 10.2% to 20% of body weight (Negrini and Carabalona, 2002; Pascoe et al. 1,997 ; Sheir-Neiss et al. 2003), and sometimes show some students carrying backpacks with excessive weight corresponding to 30 - 40% of their body weight (Cottalorda et al. 2004). eight causes significant changes in the biomechanics of the spine.

CONCLUSION

The concern of society with the weight of the backpacks has been increasing over the past years. This problem could be solved by students, parents and the school itself, which could provide lockers where children could leave the heaviest materials.

The results suggest a high level of ignorance about the existence of the Law of Mochila, recommending its weight. We found that half of the students carry a backpack with school overweight to 10% of body mass permitted Knapsack Law, No. 2772/97, an amount recommended by WHO (2004).

Based on these data, we see the importance of this study, as well as awareness of these students, once certain information is not available for the population, and that schools have the obligation of acquiring such knowledge. It also proved that in private schools being overweight was higher than in public (Deco/ProTest,2003).

We suggest a continuity for the next study to confirm this difference.

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ANALYSIS OF BODY WEIGHT IN RELATION TO SCHOOL BACKPACK IN A PRIVATE SCHOOL ZONE NORTH OF PORTO ALEGRE.

ABSTRACT

The backpack is the method most used by students to organize and carry all the school supplies. This study aimed to analyze body weight in relation to school backpack at a private school, to know whether to use their backpacks within the maximum weight. Characterized by a cross-sectional observational analytical methodology and descriptive concerned with identifying the weight of the school backpack Elementary School. The heads of the research participants were in agreement with the resolution 196/96. To collect data, we used the "Instrument for Knowledge Perception of Students on the School Environment Posture Adopted - POSPER. Sample consisted of 101 students, students of 1st, 2nd and 3rd year of elementary school. The results showed high level of ignorance about the existence of the Law of Mochila, recommending its weight. We found that half of the students carry a backpack with school overweight to 10% of body weight permitted, a value recommended by WHO (2004). About shipping school supplies, it was observed that the students of 3rd year using the backpack with support on both shoulders to perform this task and the 1st and 2nd year model wheel. From the results, it is concluded that the weight of the backpacks influenced a possibility of change, as they were frightened by the weight of their backpacks and this result was reported to the Directorate. It is noticed that there was a decrease in the backpacks of materials from the next day. However, it is suggested to continue this study to see if the private schools being overweight is higher than in public.

KEYWORDS: Students, weight of the backpack and school backpack.

ANALYSE DU POIDS CORPOREL PAR RAPPORT AU SAC À DOS SCOLAIRE DANS UNE ECOLE PRIVEE ZONE NORD DE PORTO ALEGRE.

RÉSUMÉ

Le sac à dos est la méthode la plus utilisée par les étudiants pour organiser et effectuer toutes les fournitures scolaires. Cette étude visait à analyser le poids corporel par rapport à sac d'école dans une école privée, à savoir s'il convient d'utiliser leur sac à dos dans le poids maximum. Caractérisé par une section transversale méthode d'analyse observationnelle et descriptive concernés à identifier le poids de l'école sac d'école primaire. Les chefs des participants à la recherche étaient en accord avec la résolution 196/96. Pour collecter les données, nous avons utilisé l'instrument "pour la perception des connaissances des étudiants sur la posture de l'environnement scolaire Adoptée - POSPER. Échantillon était composé de 101 élèves, étudiants de 1ère, 2ème et 3ème année de l'école élémentaire. Les résultats ont montré de haut niveau de l'ignorance de l'existence de la loi du Mochila, recommandant son poids. Nous avons constaté que la moitié des élèves portent un sac à dos avec un excès de poids l'école à 10% du poids corporel autorisée, une valeur recommandée par l'OMS (2004). À propos de fournitures scolaires expédition, il a été observé que les élèves de 3e année en utilisant le sac à dos avec l'appui sur les deux épaules pour effectuer cette tâche, et les 1er et 2 roues modèle de l'année. D'après les résultats, on peut conclure que le poids des sacs à dos influencé une possibilité de changement, car ils ont été effrayés par le poids de leurs sacs à dos et ce résultat a été signalé à la Direction. Il est remarqué qu'il y avait une diminution dans les sacs à dos de matériaux à partir du jour suivant. Toutefois, il est suggéré de poursuivre cette étude pour voir si les écoles privées étant en surpoids est plus élevée qu'en public.

MOTS-CLÉS: étudiants, le poids du sac à dos et sac d'école.

ANÁLISIS DE PESO CORPORAL EN RELACIÓN CON LA MOCHILA ESCOLAR EN UNA ESCUELA PRIVADA ZONA NORTE DE PORTO ALEGRE.

RESUMEN

La mochila es el método más utilizado por los estudiantes para organizar y llevar a todos los útiles escolares. Este estudio tuvo como objetivo analizar el peso corporal en relación con la mochila escolar en una escuela privada, para saber si se debe usar la mochila dentro del peso máximo. Se caracteriza por una sección transversal metodología observacional analítico y

descriptivo que ver con la identificación del peso de la mochila de la escuela La escuela primaria. Las cabezas de los participantes en la investigación estaban de acuerdo con la resolución 196/96. Para recopilar los datos, se utilizó el instrumento "Percepción de conocimiento de los estudiantes sobre la postura Ambiente de la Escuela Aprobada - POSPER. Muestra estuvo compuesta por 101 estudiantes, alumnos de 1º, 2º y 3º de primaria. Los resultados mostraron alto nivel de ignorancia sobre la existencia de la Ley de la Mochila, recomendando su peso. Se encontró que la mitad de los estudiantes llevan una mochila escolar con sobrepeso y 10% del peso corporal permite, un valor recomendado por la OMS (2004). Acerca de útiles escolares de envío, se observó que los alumnos de 3º año con la mochila con el apoyo en ambos hombros para llevar a cabo esta tarea y la primera y segunda rueda año del modelo. De los resultados, se concluye que el peso de las mochilas influido en una posibilidad de cambio, ya que estaban atemorizados por el peso de sus mochilas y este resultado se informó a la Dirección. Se notó que hubo una disminución en las mochilas de los materiales desde el día siguiente. Sin embargo, se sugiere seguir este estudio para ver si las escuelas privadas sobrepeso es mayor que en público.

PALABRAS CLAVE: Estudiantes, el peso de la mochila y la mochila escolar.

ANÁLISE DO PESO CORPORAL EM RELAÇÃO A MOCHILA ESCOLAR EM UMA ESCOLA PRIVADA DA ZONA NORTE DE PORTO ALEGRE.

RESUMO

A mochila é o método mais utilizado pelos alunos para organizar e transportar todo o material escolar. Este estudo teve como objetivo analisar o peso corporal em relação à mochila escolar em uma escola privada, para saber se utilizam suas mochilas dentro do peso máximo. Caracterizou-se por uma metodologia observacional transversal analítico-descriptivo preocupado em identificar o peso da mochila dos escolares do Ensino Fundamental. Os responsáveis pelos participantes da pesquisa estiveram de acordo com a resolução 196/96. Para a coleta de dados utilizou-se o "Instrumento para Conhecimento da Percepção de Alunos sobre a Postura Adotada no Ambiente Escolar – POSPER. Amostra foi composta por 101 alunos, estudantes do 1º, 2º e 3º ano do Ensino Fundamental. Os resultados obtidos mostraram elevado nível de desconhecimento em relação à existência da Lei da Mochila, preconizando o peso da mesma. Verificamos que a metade dos alunos transportam a mochila escolar com peso excessivo aos 10% da massa corporal permitida, valor este preconizado pela OMS (2004). Sobre o transporte do material escolar, observou-se que os alunos do 3º ano utilizam a mochila nas costas com apoio sobre os dois ombros para a realização dessa tarefa e no 1º e 2º ano o modelo de rodinha. A partir dos resultados, conclui-se que a pesagem das mochilas influenciou numa possibilidade de mudanças, pois os mesmos ficaram assustados com o peso de suas mochilas e este resultado foi divulgado para a Direção. Percebe-se que houve uma diminuição dos materiais nas mochilas desde o dia seguinte. Contudo, sugere-se a continuidade deste estudo para comprovar se nas escolas privadas o excesso de peso é mais elevado que nas públicas.

PALAVRAS-CHAVE: Alunos, Peso da mochila e Mochila escolar.